

Amendments to the Claims

Please amend Claim 14. The Claim Listing below will replace all prior versions of the claims in the application:

Claim Listing

1. (Previously presented) A method of generating a decentralized model on a computer network, the decentralized model including one or more models having computer instructions and data that describe behavior of a system and/or evaluate the system, comprising the steps of:
 - generating data objects and/or function objects, at least some of the data objects and/or function objects being model inputs and/or model outputs, at least some of the function objects defining interdependencies within a model by providing solvable expressions that relate data objects and/or function objects;
 - publishing identifiers for the data objects and/or the function objects;
 - based on the published identifiers, subscribing to the data objects and/or the function objects by creating relationships between the data objects and/or the function objects by referencing the data objects and/or the function objects within the function objects, thereby linking the data objects and/or the function objects, wherein networks of linked data objects and/or function objects emerge, said references utilizing the published identifiers;
 - sending messages to referencing data objects and/or function objects when referenced data objects and/or referenced function objects change;
 - invoking methods on data objects and/or function objects when data objects and/or function objects require information;
 - solving the expressions within the function objects when the messages are received;
 - storing the data objects and/or the function objects in a central location on a single computing device or in a distributed manner across multiple computing devices on a computer network; and

wherein the relationships between the data objects and/or function objects are created without using a single coordinating computing device, or are created using multiple coordinating computing devices on the computer network.

2. (Original) The method of Claim 1 wherein at least a part of the configuration of the networks of linked data objects and/or function objects is predefined and used to determine which data objects and/or function objects are generated on which of the computing devices in the computer network.
3. (Original) The method of Claim 1 wherein a user interface is defined that displays the data objects and/or function objects on a computing device on the computer network using a client process that communicates with a server process wherein the data objects and/or function objects can be viewed on any computing device connected to the computer network.
4. (Original) The method of Claim 1 wherein the data objects and/or function objects are stored in logical groups.
5. (Original) The method of Claim 4 wherein the logical groups are defined by geography, business organization or site.
6. (Original) The method of Claim 1 wherein the references to the data objects and/or function objects are published using electronic media, print media or human conversation.
7. (Original) The method of Claim 6 wherein the electronic media is indexed and searchable.

8. (Original) The method of Claim 1 wherein the step of generating the data objects and/or function objects provides an interface mapping for data objects and/or function objects stored in application programs, databases or computer code libraries.
9. (Previously Presented) The method of Claim 1 wherein the function objects are implemented by computer code that is compiled, dynamically linked and evaluated at runtime.
10. (Original) The method of Claim 1 wherein the function objects are implemented by computer code that is interpreted and evaluated at runtime.
11. (Original) The method of Claim 1 wherein the sending or receiving of messages can be enabled or disabled based on predefined criteria.
12. (Original) The method of Claim 11 wherein the criteria is based upon message source, message destination or message contents.
13. Cancelled.
14. (Currently Amended) An apparatus for generating a decentralized model on a computer network, the decentralized model including one or more models having computer instructions and data that describe behavior of a system and/or evaluate the system, comprising:
 - data objects and/or function objects, at least some of the data objects and/or function objects being model inputs and/or model outputs, at least some of the function objects defining interdependencies within a model by providing solvable expressions that relate data objects and/or function objects;
 - identifiers for the data objects and/or the function objects, the identifiers being published and enabling ~~subscriptions~~ subscriptions to the data objects and/or function objects;

subscriptions to the data objects and/or the function objects generated by creating relationships between the data objects and/or the function objects by referencing the data objects and/or the function objects within the function objects, thereby linking the data objects and/or the function objects, wherein networks of linked data objects and/or function objects emerge;

messages sent to referencing data objects and/or function objects when referenced data objects and/or referenced function objects change;

an invoker component invoking methods on data objects and/or function objects when data objects and/or function objects require information;

a solver component solving the expressions within the function objects when the messages are received;

a storage component storing the data objects and/or the function objects in a central location on a single computing device or in a distributed manner across multiple computing devices on a computer network; and

wherein the relationships between the data objects and/or function objects are created without using a single coordinating computing device, or are created using multiple coordinating computing devices on the computer network.

15. (Previously presented) An apparatus for generating a decentralized model on a computer network, the decentralized model including one or more models having computer instructions and data that describe behavior of a system and/or evaluate the system, comprising:

a means for generating data objects and/or function objects, at least some of the data objects and/or function objects being model inputs and/or model outputs, at least some of the function objects defining interdependencies within a model by providing solvable expressions that relate data objects and/or function objects;

a means for publishing identifiers for the data objects and/or the function objects;

a means for subscribing to the data objects and/or the function objects by creating relationships between the data objects and/or the function objects by referencing the data objects and/or the function objects within the function objects, thereby linking the data

objects and/or the function objects, wherein networks of linked data objects and/or function objects emerge, the means for subscribing being responsive to the means for publishing and utilizing the published identifiers;

a means for sending messages to referencing data objects and/or function objects when referenced data objects and/or referenced function objects change;

a means for invoking methods on data objects and/or function objects when data objects and/or function objects require information;

a means for solving the expressions within the function objects when the messages are received;

a means for storing the data objects and/or the function objects in a central location on a single computing device or in a distributed manner across multiple computing devices on a computer network; and

wherein the relationships between the data objects and/or function objects are created without using a single coordinating computing device, or are created using multiple coordinating computing devices on the computer network.

16. (Previously presented) A computer program product comprising:

a computer usable medium for generating a decentralized model on a computer network, the decentralized model including one or more models having computer instructions and data that describe behavior of a system and/or evaluate the system;

a set of computer program instructions embodied on the computer usable medium, including instructions to:

generate data objects and/or function objects, at least some of the data objects and/or function objects being model inputs and/or model outputs, at least some of the function objects defining interdependencies within a model by providing solvable expressions that relate data objects and/or function objects;

publish identifiers for the data objects and/or the function objects;

based on the published identifiers subscribe to the data objects and/or the function objects by creating relationships between the data objects and/or the function objects by

referencing the data objects and/or the function objects within the function objects, thereby linking the data objects and/or the function objects, wherein networks of linked data objects and/or function objects emerge;

send messages to referencing data objects and/or function objects when referenced data objects and/or referenced function objects change;

invoke methods on data objects and/or function objects when data objects and/or function objects require information;

solve the expressions within the function objects when the messages are received;

store the data objects and/or the function objects in a central location on a single computing device or in a distributed manner across multiple computing devices on a computer network; and

wherein the relationships between the data objects and/or function objects are created without using a single coordinating computing device, or are created using multiple coordinating computing devices on the computer network.